



Exhaust Emission Data Sheet

250DQDAA

60 Hz Diesel Generator Set

EPA NSPS Stationary Emergency

Engine Information:

Model: Cummins Inc. QSL9-G7 NR3
Type: 4 Cycle, In-line, 6 Cylinder Diesel
Aspiration: Turbocharged and CAC
Compression Ratio: 16.1:1
Emission Control Device: Turbocharger and CAC

Bore: 4.49 in. (114 mm)
Stroke: 5.69 in. (145 mm)
Displacement: 543 cu. in. (8.9 liters)

	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>	<u>Full</u>	<u>Full</u>
PERFORMANCE DATA	Standby	Standby	Standby	Standby	Prime
Engine HP @ Stated Load (1800 RPM)	95.5	191	286.5	382	342
Fuel Consumption (gal/hr)	5.95	10.50	15.05	19.59	17.69
Exhaust Gas Flow (CFM)	968.7	1506.1	1906.3	2149.6	N/A
Exhaust Temperature (°F)	634	758	844	940	700
EXHAUST EMISSION DATA					
HC (Total Unburned Hydrocarbons)	0.33	0.162	0.09	0.046	0.052
NOx (Oxides of Nitrogen as NO ₂)	1.67	1.66	2.19	3.42	2.68
CO (Carbon Monoxide)	3.18	3.18	1.85	0.77	N/A
PM (particular Matter)	0.22	0.16	0.08	0.04	N/A
SO ₂ (Sulfur Dioxide)	0.142	0.132	0.123	0.115	0.12
Smoke (Bosch)	0.53	0.438	0.382	0.238	0.292

All values are Grams per HP-Hour

TEST CONDITIONS

Data was recorded during steady-state rated engine speed (± 25 RPM) with full load ($\pm 2\%$). Pressures, temperatures, and emission rates were stabilized.

Fuel Specification: 46.5 Cetane Number, 0.035 Wt.% Sulfur; Reference ISO8178-5, 40 CFR86.1313-98 Type 2-D and ASTM D975 No. 2-D.
Fuel Temperature: 99 ± 9 °F (at fuel pump inlet)
Intake Air Temperature: 77 ± 9 °F
Barometric Pressure: 29.6 ± 1 in. Hg
Humidity: NOx measurement corrected to 75 grains H₂O/lb dry air
Reference Standard: ISO 8178

The NOx, HC, CO and PM emission data tabulated here were taken from a single engine under the test conditions shown above. Data for the other components are estimated. These data are subjected to instrumentation and engine-to-engine variability. Field emission test data are not guaranteed to these levels. Actual field test results may vary due to test site conditions, installation, fuel specification, test procedures and instrumentation. Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may results in elevated emission levels.